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File
Val
Reade
498245

MEMORANDUM FOR THE RECORD

SUBJECT: Briefing for a Proposed Camera System.

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1. On 25 February 1964 the undersigned attended a briefing given by [REDACTED] of the [REDACTED] at the Office of the Corp of Engineers at Gravelley Point.

2. The proposed system was referred to as the Hobo System and could be used either as a single self contained system similar to the A package or an SI system in a more complex package. It consisted of a terrain camera and stellar camera rigidly mounted to maintain a fixed angular relationship.

3. Some of the more pertinent specifications are:

		<u>Terrain</u>	<u>Stellar</u>
Lens	3"	3" f4.5 Biogou	3" f2.3 Balter
AWAR Resolution	c=3.0	90 1/mm	50 1/mm
	c=0.8	80 1/mm	N.A.
	c=0.3	60 1/mm	N.A.
Format		4.5"x4.5" on 5" stock	1.25"D on 35mm stock
Angular Coverage		74° x 74°	23.5°
Lens Distortion		25%	3%
Film Clamping Medium		Glass plate	Glass plate
Reseau (?)		10mm spaced dots	10mm spaced dots
Fiducials		2 sets of 4	2 sets of 4
Shutter		Rotary	Rotary
Exposure in seconds (fixed)	/ 1/500		2
Cycling rate		12.1/2 seconds	4 seconds
Data recorder		Time and date	Time and date
Nominal Film capacity		1000'	1000'

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4. No pressurization or Image Motion Compensation is ~~proposed~~. The package size exclusive of recovery bucket is 25" x 14" x 11.5" and weighs 53 pounds. The stellar lens is set at an angle of 96° from the terrain lens. With a nominal photo scale of $1/2, 400,000$ mapping, scales obtainable should be $1/200,000$.

5. The projected accuracies obtainable are:

Target Contrast	$c=0.3$	$c=0.8$
Controur Interval (90%)	240'	150'
Elevation accuracy (90%)	60'	45'
Positional accuracy (90%)	75'	65'
Ground resolution	140'	110'

6. Delivery based on a 9 month program would consist of 6 units for a Firm Fixed Price of [REDACTED] An additional 50 units would run [REDACTED] each.

7. In addition, they demonstrated a novel method of producing binary information photographically by using a silicon diode junction as the light source. The dots were approximately 1.5mm in diameter and extremely well defined. With this system packing density could be very high and reliability tests indicate practically trouble-free operation.

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